

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspio.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

25944	4 7590 01/15/2004				EXAMINER	
OLIFF & BERR P.O. BOX 19928	IDGE, PLC	SPECTOR, DAVID N				
ALEXANDRIA, VA 22320				ART UNIT	PAPER NUMBER	
				2873	. / 12	
				DATÉ MAILED: 01/15/200	4 13	
APPLICATION NO.	FILING DATE	FIRST NAM	ED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/987,953	11/16/2001	Yosh	itaka Itoh	039504.99	. 7957	
TITLE OF INVENTION: PROJECTOR	POLARIZATION CONVI	ERSION ELEMENT, POLAR	IZATION ILLUMINATOR, I	DISPLAY USING THE SAN	TÉ ILLUMINATOR, AND	
APPLN, TYPE	SMALL ENTITY	ISSUÉ FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	NO	\$1330	\$0	\$1330	04/15/2004	

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.
- B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
- Applicant claims SMALL ENTITY status.
 See 37 CFR 1.27.
- II. PART B FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.
- III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u>

(703) 746-4000

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1) Note: A certificate of mailing can only be used for domestic mailings of the Fec(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. 25944 7590 01/15/2004 OLIFF & BERRIDGE, PLC Certificate of Mailing or Transmission I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO, on the date indicated below. P.O. BOX 19928 ALEXANDRIA, VA 22320 (Depositor's name (Signature APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 09/987.953 11/16/2001 Yoshitaka Itoh 039504.99 TITLE OF INVENTION: POLARIZATION CONVERSION ELEMENT, POLARIZATION ILLUMINATOR, DISPLAY USING THE SAME ILLUMINATOR, AND **PROJECTOR** APPLN. TYPE SMALL ENTITY ISSUE FEE PUBLICATION FEE TOTAL FEE(S) DUE DATE DUE nonprovisional NO \$1330 04/15/2004 \$1330 **EXAMINER** ART UNIT **CLASS-SUBCLASS** SPECTOR, DAVID N 2873 359-618000 1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). 2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer attorneys or agents. If no name is listed, no name will be printed. Number is required. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignce is identified below, no assignce data will appear on the patent. Inclusion of assignce data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment. (A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY) Please check the appropriate assignee category or categories (will not be printed on the patent); ☐ individual ☐ corporation or other private group entity government 4a. The following fee(s) are enclosed: 4b. Payment of Fee(s): ☐ Issue Fee A check in the amount of the fee(s) is enclosed. Publication Fee ☐ Payment by credit card. Form PTO-2038 is attached. ☐ Advance Order - # of Copies The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form) Director for Patents is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above. (Authorized Signature) NOTE; The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office. This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents Alexandria, Virginia 27313-1450.

TRANSMIT THIS FORM WITH FEE(S)

SEND TO: Commissioner for Patents, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/987,953	11/16/2001	Yoshitaka Itoh	039504.99	,7957	
25944	7590 01/15/2004		EXAMINER		
OLIFF & BERRIDGE, PLC			SPECTOR, DAVID N		
P.O. BOX 19928 ALEXANDRIA, VA 22320			ART UNIT	PAPER NUMBER	
•			2873		
			DATE MAILED: 01/15/2004	1	

Determination of Patent Term Extension or Adjustment under 35 U.S.C. 154 (b)

A reissue patent is for "the unexpired part of the term of the original patent." See 35 U.S.C. 251. Accordingly, the above-identified reissue application is not eligible for Patent Term Extension or Adjustment under 35 U.S.C. 154(b).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

ng a			m			
	Application No.	Applicant(s)				
Nation of Allowahilit.	09/987,953	ITOH ET AL.				
Notice of Allowability	Examiner	Art Unit				
	David N. Spector	2873				
The MAILING DATE of this communication appeal claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in the or other appropriate communic GHTS. This application is subtand MPEP 1308.	is application. If not includes application. If not include atton will be mailed in due	led course. THIS			
2. The allowed claim(s) is/are 1-45.						
 3.						
, —	heen received					
 Certified copies of the priority documents have been received. Certified copies of the priority documents have been received in Application No. <u>09/029,080</u>. 						
 Copies of the certified copies of the priority do- International Bureau (PCT Rule 17.2(a)). 			ation from the			
* Certified copies not received:	odor 35 U.S.C. & 110(a) (to a p	rovisional application)				
5. Acknowledgment is made of a claim for domestic priority units.(a) The translation of the foreign language provisional a		rovisional application).				
6. Acknowledgment is made of a claim for domestic priority u		21.				
Applicant has THREE MONTHS FROM THE "MAILING DATE" of below. Failure to timely comply will result in ABANDONMENT of 7. A SUBSTITUTE OATH OR DECLARATION must be subminformal patent application (PTO-152) which gives reas	this application. THIS THREE nitted. Note the attached EXAM	-MONTH PERIOD IS NOT INER'S AMENDMENT or	EXTENDABLE.			
8. CORRECTED DRAWINGS must be submitted. (a) including changes required by the Notice of Draftsper. 1) hereto or 2) to Paper No			Evaminer			
 (b) ☐ including changes required by the proposed drawing correction filed, which has been approved by the Examiner. (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No 						
Identifying indicia such as the application number (see 37 CFR 1 of each sheet. The drawings should be filed as a separate paper	.84(c)) should be written on the o with a transmittal letter address	drawings in the top margin ed to the Official Draftspers	(not the back) son.			
 DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT FOR T 	sit of BIOLOGICAL MATER HE DEPOSIT OF BIOLOGICA	IAL must be submitted. L MATERIAL.	Note the			
Attachment(s)						
 1 Notice of References Cited (PTO-892) 3 Notice of Draftperson's Patent Drawing Review (PTO-948) 5 Information Disclosure Statements (PTO-1449), Paper No 7 Examiner's Comment Regarding Requirement for Deposit of Biological Material 	4∏ Interview S 6∏ Examiner's	formal Patent Application ummary (PTO-413), Pape Amendment/Comment Statement of Reasons for	r No			



REASONS FOR ALLOWANCE

- 1. Claims 1-45 are allowed in light of applicant's arguments/amendments. A statement of the examiner's reasons for allowance follows.
- 2. Applicant's independent claims are directed to a polarizing conversion device (claim 1) with particular features for controlling unwanted stray light, a polarizing illumination device that includes the instant polarizing conversion device (claim 8); a display apparatus (claim 18) that includes the polarizing illumination device and a modulating device; a projector (claim 19) that includes the polarizing illumination device, at least one modulating device, and a projection optical system; the method embodied in the instant polarizing conversion device (claim 22); and to an alternative representation of the instant polarization conversion device in a means-plus-function format (claim 27). Each of these independent claims includes, and is distinguished over the prior art by. the extant features/limitations of the polarizing conversion device in claim 1. It includes: a polarizing separation element having a light-incident side, a light-emitting side, and a polarizing separation plane that separates said P-state and S-state polarized beams by transmitting one of said P-state and S-state polarized beams there-through toward the light-emitting side of the polarizing separation element, and reflecting another of the Pstate and S-state polarized beams. A reflecting plane is disposed substantially parallel to said polarizing separation plane reflects said another of the P-state and S-state polarized beams reflected by said polarizing separation plane toward said light-emitting side of the polarization element. In particular, a selective phase plate aligns a polarization direction of one of said P-state and S-state polarized beams separated by the aforementioned polarizing separation element with a polarization direction of another of the



Art Unit: 2873

P-state and S-state polarized beams, and a light-shielding element which prevents light from directly entering the reflecting plane interposed at the light incident side of said polarizing separation element. The prior art taken either singly or in combination fails to anticipate or fairly suggest the limitations of applicant's independent claims, in such a manner that a rejection under 35 U.S.C. 102 or 103 would be proper. The claimed invention is therefore considered to be in condition for allowance as being novel and nonobvious over prior art.

- 3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."
- 4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David N. Spector whose telephone number is (703) 305-1521. The examiner can normally be reached at this number Monday through Friday between 6:00 AM and 2:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Y. Epps, can be reached on (703) 308-4883. The fax number for the organization where this application is assigned is (703) 308-7722.

January 7, 2003

David N. Spector Patent Examiner Hung Xuan Dang